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10/582,084	06/08/2006	Seiji Nakamura	2006_0857A	1794
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EXAMINER				
WONG, TITUS				
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2184				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary****Application No.**

10/582,084

**Applicant(s)**

NAKAMURA ET AL.

**Examiner**

Titus Wong

**Art Unit**

2184

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/ISD)
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date 6/8/2006.

## DETAILED ACTION

### ***Specification***

The disclosure is objected to because of the following informalities:

Page 21, line 5, after "present", -invention- should be inserted.

Appropriate correction is required.

### ***Claim Objections***

Claims 1-16 are objected to because of the following informalities:

Claim 1, line 22, "lager" should read –larger-;

Claim 6, line 17, "are" should read –is-.

In claim 1, lines 3, 5, 15, and 18, claim 4, lines 7 and 18, claim 6, lines 3, 5, 12, 15, 23, and 28, claim 7, line 3, claim 10, line 4, claim 12, line 9 and 20, claim 14, lines 5, 12, and 21, and claim 15, line 4, recite "**for**" performing a functionality which constitute intended use, never actually takes places, therefore renders any recitation claimed after not be given patentable weight. The claim should be amended to recite more direct and positive language such as "to", "that", or "which".

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 11, it is not clear what is meant by "or more" since there can be multiple interpretations. Similar problems exist in claims 2, 4, 6, 7, 9, 10, 12, 14, and 15.

In claim 1, line 24, it is not clear what is meant by "the time which has a predetermined relation" since there can be multiple interpretations. Similar problems exist in claims 2, 3, 6-11, and 14-16.

In claim 2, lines 7-8, it is not clear what is meant by "transmits the response to the command" since the command cannot receive a response because it is not a tangible device.

In claim 2, lines 9-10, it is not clear what is meant by "does not accept the data blocks when receiving the divided data blocks" since it is receiving data blocks but then it does not accept data blocks.

In claim 3, lines 3-4, it is not clear what is meant by "next to" since there can be multiple interpretations. Similar problems exist in claims 8, 11, and 16.

In claim 3, lines 7-8, "the response corresponding to the next command" lacks antecedent basis since it was not mentioned previously.

In claim 4, line 8, it is not clear what is meant by "actually transmitting or receiving". Similar problems exist in claims 7, 10, 12, and 15.

In claim 6, lines 3, 12, 23, and 27, it is not clear whether the commands are all the same command.

In claim 6, lines 5-20, it is not clear what is meant by "according to the command as required after transmitting and receiving the command and the response to and from the electronic apparatus..." and "at the time which has a predetermined relation to the block size setting command, when receiving a response..." The sentence structure and claim language are confusing and proper punctuation and rephrasing is suggested. Similar problems exist in claim 14.

Applicant is required to review the claim and correct all language which does not comply with 35 U.S.C. § 112, second paragraph.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saeki (US Publication No. 2003/0006279 A1) hereafter referred to as Saeki'279, in view of Asami. (US Patent No. 6,036,100) hereafter referred to as Asami'100.

Referring to claim 1, Saeki'279, as claimed, an electronic apparatus (see Fig. 4) comprising: an interface section (IC card reader/writer, see Fig. 4) that is connected to a command/response line for receiving a command from a host device (host device 2, see Fig. 4) and transmitting a response to the host device and a data line for transmitting and receiving data according to the command as required after transmitting and receiving the command and the response to and from the host device via the command/response line (transmits a telegraphic message from a host device or transmits a telegraphic message to a host device, see para. [0027], lines 4-7 and Fig. 1), the data being transmitted or received while the data is divided into data blocks with a block size specified by the host device when the data length is a predetermined length or more (divides the data into blocks of a predetermined length that does not exceed the memory capacity, see para. [0033], lines 8-10); a data buffer that stores the data (RAM 4, see Fig. 4); and a storage section that stores information about the block size when the interface section receives a command for specifying the block size of the data block from the host device (size of the data, see para. [0033], lines 4-6); wherein when the interface section receives a command (hereinafter, "block size setting command") for transmitting data including information about the block size of the data block via the data line from the host device, and when the block size is larger than a capacity of the data buffer, the interface section transmits a response (when the size of the data is

bigger than the memory capacity, the host device 2 divides the host data into data blocks of a predetermined length that does not exceed the memory capacity, see para. [0033], lines 4-13 and Fig. 3).

However, Saeki'279 does not appear to teach transmitting error information when an error is detected.

Asami'100 further discloses transmitting error information when an error is detected (error detection processing to check for errors and transmit error message, see Col. 5, lines 12-14 and 31-37).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify Saeki'279's invention to comprise transmitting error information when an error is detected, as taught by Asami'100, in order to provide improved data reliability and data transmission (see Col. 2, lines 27-32)

As to claim 2, Saeki'279 also discloses wherein the time which has a predetermined relation is the time when the electronic apparatus receives a command for actually transmitting or receiving the data blocks with the block size created by dividing the data with the predetermined length or more from the host device (divides the host data into blocks of predetermined length and sends them, see para. [0033], lines 8-10), and the electronic apparatus transmits the response to the command, and does not accept the data blocks when receiving the divided data blocks from the host device (see Fig. 1).

However, Saeki'279 does not appear to teach transmitting error information.

Asami'100 further discloses transmitting error information (error detection processing to check for errors and transmit error message, see Col. 5, lines 12-14 and 31-37).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify Saeki'279's invention to comprise transmitting error information, as taught by Asami'100, in order to provide improved data reliability and data transmission (see Col. 2, lines 27-32)

As to claim 3, Saeki'279 also discloses wherein the time which has a predetermined relation is the time when the electronic apparatus receives a command next to the block size setting command (transmissible data length, see para. [0005], lines 2-3) transmitted from the host device, the electronic apparatus adds the response to the response corresponding to the next command, and then transmits the response (transmits response information, see para. [0036], lines 1-4 and Fig. 1).

However, Saeki'279 does not appear to teach transmitting error information.

Asami'100 further discloses transmitting error information (error detection processing to check for errors and transmit error message, see Col. 5, lines 12-14 and 31-37).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify Saeki'279's invention to comprise transmitting error information, as taught by Asami'100, in order to provide improved data reliability and data transmission (see Col. 2, lines 27-32)



As to claim 4, Saeki'279 also discloses wherein in case that the interface section receives a command including information about the block size of the data block from the host device via the command/response line and the block size is larger than the capacity of the data buffer (see Fig. 3, step S13), when the electronic apparatus receives a command for actually transmitting or receiving the data blocks with the block size created by dividing the data with the predetermined length or more from the host device (divides the data into blocks of a predetermined length that does not exceed the memory capacity, see para. [0033], lines 8-10), the electronic apparatus transmits a response corresponding to the command, and when the divided data blocks are transmitted from the host device, the electronic apparatus does not accept the data blocks (it is interpreted that the IC card only accepts data that is of a predetermined length, see para. [0033], lines 8-10), or the electronic apparatus adds information about the error response corresponding to the command for specifying the block size to a response corresponding to a next command transmitted from the host device, and then transmits the response.

However, Saeki'279 does not appear to teach transmitting error information.

Asami'100 further discloses transmitting error information (error detection processing to check for errors and transmit error message, see Col. 5, lines 12-14 and 31-37).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify Saeki'279's invention to comprise transmitting

error information, as taught by Asami'100, in order to provide improved data reliability and data transmission (see Col. 2, lines 27-32)

As to claim 5, Saeki'279 also discloses an IC card (IC card 3, see Fig. 4).

Referring to claim 6, Saeki'279, as claimed, a host device (host device 2, see Fig. 4) comprising: an interface section (interface with IC card reader/writer, see Fig. 4) that is connected to a command/response line for transmitting a command to an electronic apparatus (IC card reader/writer or IC card 3, see Fig. 4) and receiving a response from the electronic apparatus, and a data line for transmitting and receiving data according to the command as required after transmitting and receiving the command and the response to and from the electronic apparatus via the command/response line (transmits a telegraphic message from a host device or transmits a telegraphic message to a host device, see para. [0027], lines 4-7 and Fig. 1), when the data is a predetermined length or more, the interface section transmitting and receiving data blocks with a predetermined block size created by dividing the data, and transmitting a command for specifying the block size to the electronic apparatus (host device divides the data into the data blocks of a predetermined length and sends them, see para. [0033], lines 4-10), wherein the interface section transmits a block size setting command (predetermined length, see para. [0033], lines 9-10) for transmitting data including information about the block size of the data blocks via the data line to the electronic apparatus, after the data are transmitted, at the time which has a predetermined relation to the block size setting command (see Fig. 1), when receiving a response, the interface section transmits a command for inquiring about a data capacity

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of a data buffer to the electronic apparatus (buffer size of RAM 4, see para. [0043], lines 9-12), determines a new block size which is not more than the capacity of the data buffer in the electronic apparatus based on the response, and transmits a command for specifying the new block size to the electronic apparatus (determines that the host data does not exceed memory capacity, see para. [0033], lines 9-10 and para. [0037], lines 3-5).

However, Saeki'279 does not appear to teach transmitting error information.

Asami'100 further discloses transmitting error information (error detection processing to check for errors and transmit error message, see Col. 5, lines 12-14 and 31-37).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify Saeki'279's invention to comprise transmitting error information, as taught by Asami'100, in order to provide improved data reliability and data transmission (see Col. 2, lines 27-32)

Note claims 7, 10, and 15 recite the corresponding limitations of claim 2. Therefore they are rejected based on the same reason accordingly.

Note claims 8, 11, and 16 recite the corresponding limitations of claim 3. Therefore they are rejected based on the same reason accordingly.

Note claim 9 recites the corresponding limitations of claim 1. Therefore it is rejected based on the same reason accordingly.

Note claim 12 recites the corresponding limitations of claim 4. Therefore it is rejected based on the same reason accordingly.

Note claim 13 recites the corresponding limitations of claim 5. Therefore it is rejected based on the same reason accordingly.

Note claim 14 recites the corresponding limitations of claim 6. Therefore it is rejected based on the same reason accordingly.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ohya et al. (U.S. Publication No. 2003/0106942 A1) discloses an IC card and data processing method.

Tanaka (U.S. Patent No. 5,905,245) discloses an IC card reading/writing apparatus and an IC card system.

Tanaka (U.S. Patent No. 6,199,120 B1) discloses an IC card reading/writing apparatus and method for allowing use of multiple vendors.

Tellier et al. (U.S. Patent No. 6,223,298 B1) discloses an interface for communication with an IC card and apparatus fitted with such an interface.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Titus Wong whose telephone number is (571) 270-1627. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Henry Tsai can be reached on (571) 272-4176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TW  
/Henry W.H. Tsai/  
**Supervisory Patent Examiner, Art Unit 2184**